

01/29/14 Agenda

- Warm up exercise
- Review Quiz 5.4-5.5:
- I'll accept any late homework on Sections 5.3-5.5 until this Friday 1/31
- Review Homework - Worksheet 6.1 Solve Systems by Graphing
- Section 6.1 - Solve by Graphing (special cases)

Homework - Worksheet 6.2

Warm Up

Solve for y, then identify slope and y-intercept:

$$\begin{array}{r} 3x + 4y = 8 \\ \underline{-3x} \qquad \underline{-3x} \\ 4y = -3x + 8 \\ \underline{4} \quad \underline{4} \quad \underline{4} \\ y = -\frac{3}{4}x + 2 \end{array}$$

$$m = -\frac{3}{4}$$

$$b = 2$$

$$\begin{array}{r} 2x - y = 8 \\ \underline{-2x} \qquad \underline{-2x} \\ -y = -2x + 8 \\ \underline{-1} \quad \underline{-1} \quad \underline{-1} \\ y = 2x - 8 \end{array}$$

$$m = 2 = \frac{2}{1}$$

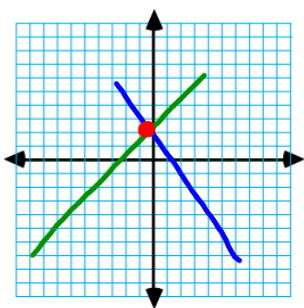
$$b = -8$$

6.1 - Solve Systems of Equations by Graphing

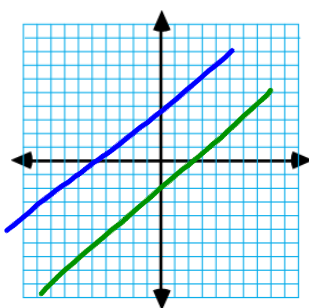
Target 6A

January 29, 2014

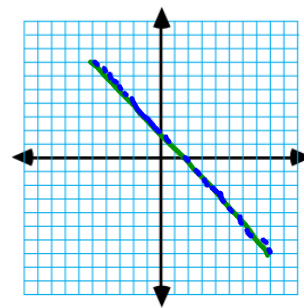
Is an ordered pair the only type of solution?



1
SOLUTION



NO
SOLUTION



∞ NUMBER
OF SOLUTIONS

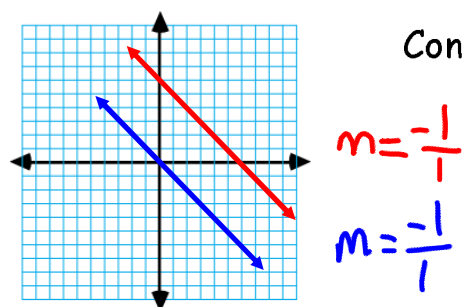
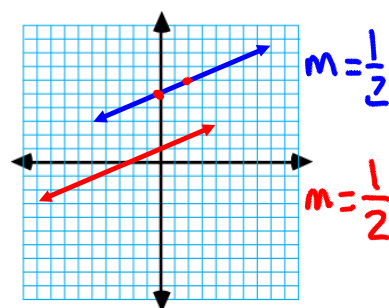
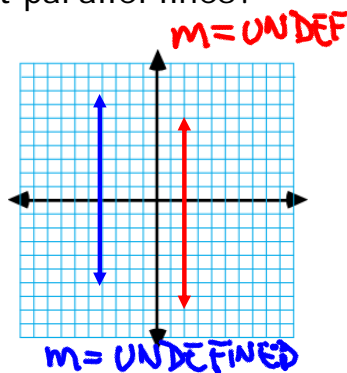
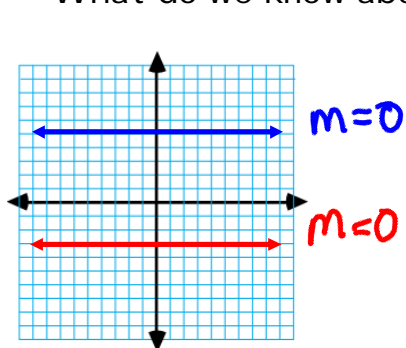
6.1 - Solve Systems of Equations by Graphing

Target 6A

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Investigation:

What do we know about parallel lines?



Conclusion:

PARALLEL LINES HAVE
THE SAME SLOPE

6.1 - Solve Systems of Equations by Graphing

Target 6A

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Solve these systems by graphing:

$$\frac{3y}{3} = \frac{x-2}{3}$$

$$y = \frac{1}{3}x - \frac{2}{3}$$

$$m = \frac{1}{3}$$

$$b = -\frac{2}{3}$$

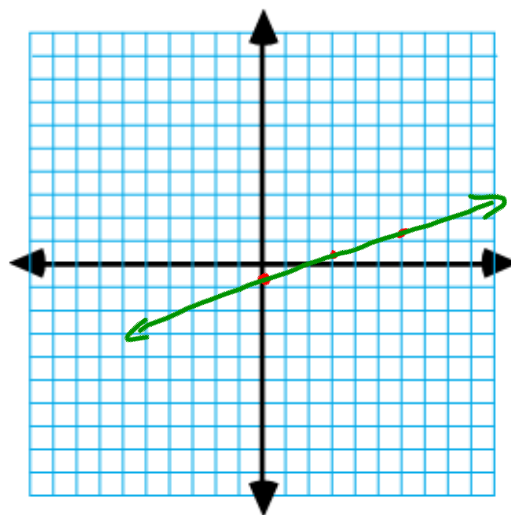
$$\frac{-6y}{-6} = \frac{-2x+4}{-6}$$

$$y = \frac{1}{3}x - \frac{2}{3}$$

$$m = \frac{1}{3}$$

$$b = -\frac{2}{3}$$

$$b = -\frac{2}{3} \quad m = \frac{1}{3}$$



Solution:

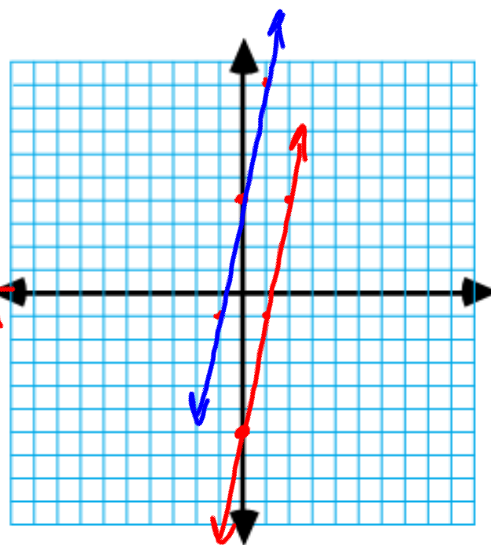
SAME EQUATION =
∞ # OF SOLUTIONS

$$y = 5x - 6 \quad m = \frac{5}{1} \quad b = -6$$

$$y = 5x + 4 \quad m = \frac{5}{1} \quad b = 4$$

SAME SLOPE, DIFFERENT
INTERCEPT =

NO SOLUTION



Solution: